



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/064,357

07/04/2002

Shih-Sheng Huang

PMXP0142USA

9626

27765

7590

05/18/2006

NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

NELSON, ALECIA DIANE

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,357

Applicant(s)

HUANG, SHIH-SHENG

Examiner

Alecia D. Nelson

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 14, 16-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 14, 16-18, and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claim 23** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites that the wireless mouse comprises a base, a first induction coil, a housing, a second induction coil, and a power module as recited in the claim. This renders the claim indefinite due to the fact that it is not clear if it is meant for the wireless mouse to be one structure containing all of the above components as recited in the claim, or if it is meant for there to be one structure as a wireless mouse containing the housing, the second induction coil, and the power module as recited and a second structure including the base and the first induction coil used with the wireless mouse similar to that which is recited in claim 1.

The claim will be rejected as best understood by the examiner. This understanding being similar to that claimed in claim 1.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2629

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. **Claim 14** is rejected under 35 U.S.C. 102(e) as being anticipated by Aoki (U.S. Patent No. 6,670,561).

Aoki teaches a wireless mouse (140) comprising a base with a surface (Figure 1B); an induction coil (141, 142) installed corresponding to a position of the surface a magnet installed inside the base for aligning the induction coil of the magnetoelectric device with an external induction coil (Cx, Cy); and a housing (120) comprising the external induction coil, the housing having a contact plane corresponding to the surface, the external induction coil having an effective cross sectional area substantially smaller than an effective cross sectional area of the induction coil (See Figures 1A-B).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2629

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-6, 16-18, and 20-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki (U.S. Patent No. 6,670,561) in view of Shirai et al. (U. S. Patent 5,550,452).

With reference to **claims 1, 5, 6, 16-18, and 23**, Aoki teaches a wireless mouse for a computer the wireless mouse capable of generating an induction current while in use (see column 6, lines 57-column 7, line 1), the induction power device comprising: a base with a flat plate (120); and a first induction coil (Cx, Cy) installed corresponding to a position of the flat-plate for transforming an electrical power of a power source to an induction magnetic field (see column 5, lines 7-11); and the wireless mouse (140) comprising: a housing with a contact plane corresponding to the flat-plate (see Figure 1; column 5, lines 7-21); a control key installed on the housing for generating a control signal corresponding to a user's control (see column 5, lines 3-6); a second induction coil (141, 142) installed inside the housing corresponding to a position of the contact plane for receiving the induction magnetic field through the contact plane in a magnetic induction manner (see column 5, lines 21-31), an effective cross-sectional area of the second induction coil being smaller than an effective cross-sectional area of the first induction coil (see Figures 1A, 1B); wherein when the contact plane of the wireless mouse is put on the flat plate of the induction power device, the second induction coil receives the induction magnetic field generated by the first induction coil so that

Art Unit: 2629

components inside the housing are capable of being powered during use (see column 6, line 57-column 7, line 1).

While Aoki teaches the usage of a control key as explained above and a block for transferring data from the mouse device (see column 5, lines 3-21), there fails to be any discussion of the signal module electrically connected to the control key for transmitting the control signal through radio waves. The examiner takes Official Notice in that the usage of a control key and a signal module for transmitting the control signal through radio waves and a receiving module for receiving the radio control signals are well known to those skilled in the art and are typical to be included in input devices, more specifically wireless type input devices. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow for the usage of a control key and a signal module as for transmission through radio waves as well known in the art in the mouse device similar to that which is taught by Aoki, in order to thereby allowing the user to have a wireless connection to transmit/receive data from the host computer. Also, While Aoki teaches all that is explained above including generating an induction current (see column 6, lines 57-67) as well as a power supply (146) being electrically connected to the second induction coil (141, 142), there fails to be any discussion of the power module transforming the induction magnetic field received by the second induction coil to a corresponding electrical power or a storage module for storing the electrical power generated by the power module in order to provide power to the wireless mouse, wherein when the contact plane of the wireless mouse is put on the flat-plate of the induction power device the second induction coil of the wireless mouse

Art Unit: 2629

receives the induction magnetic field generated by the first induction coil so that the wireless mouse is capable of being charged by the induction power device.

Shirai et al. teaches an induction charging apparatus including a power module (74) electrically connected to a second induction coil (16) for transforming the induction magnetic field received by the second induction coil (16) to a corresponding electrical power; and a storage module (30) for storing the electrical power generated by the power module so that the storage module is capable of providing the electrical power to the wireless pointing device (18); wherein when the contact plane of the wireless pointing device (18) is put on the flat-plate (26) of the induction power device (12), the second induction coil (16) of the wireless pointing device receives the induction magnetic field generated by the first induction coil (14) so that the wireless pointing device is capable of being charged by the induction power device (see Figures 1A-B; column 3, lines 18-33).

Therefore it would have been obvious to allow the induction charging arrangement as taught by Shirai et al. to be used in a wireless mouse device which generates induction current similar to that which is taught by Aoki in order to thereby provide the user with a wireless mouse device which is capable of delivering optimum usage for the user by allowing the wireless mouse to be charged while being used. This prevents the user from having to recharge the battery or continuously replace the battery.

With reference to **claims 2-4 and 22**, while Aoki teaches the usage of generating a magnetic field (see column 6, lines 57-67), and while Shirai et al. teaches the usage of a fixer for aligning the induction coil of the device with an external coil (see column 6, lines 20-53), there fails to be any disclosure of the fixer being a magnet.

However, in the disclosure of Shirai et al. the teachings of the fixer is carryout by the usage of a depressible member (78), which has guide plates extending downwardly from the four sides of the rectangular cover plate being slightly smaller than the opening (see column 5, line 45-column 6, line 8). In addition to the usage of the guide plates there is also disclosed, the usage of an engaging projection (104) for being inserted into engaging hole (102) (see column 6, lines 45-53) and a projection (130) serving as a first engaging means which is fitted in an opening (132) serving as a second engaging means, both of which maintain the device in a position to allow the magnetic coupling of the coils (see column 7, lines 14-28). Further, Shirai et al. teaches that an electromagnetic induction is generated when the primary coil and the secondary coil are in vicinity of one another thereby creating a magnetic force (see column 3, lines 4-9).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage a magnet as a fixer, wherein the fixer is used in a position similarly to that which is taught by Shirai et al. to be used similarly in a device taught by Aoki for the purpose of maintaining the device in a position to allow the magnetic coupling of the coils. Thereby allowing optimum charging of the device through the usage of induction coupling.

With reference to **claims 20 and 21**, Aoki teaches that the contact plane is substantially smaller than the extents of the flat-plate such that the housing can be moved across the flat plate, wherein a width of the flat-plate is at least twice a width of the contact plane (see Figures 1A-B).

Response to Arguments

8. Applicant's arguments with respect to claims **1-6, 14, 16-18, and 20-23** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

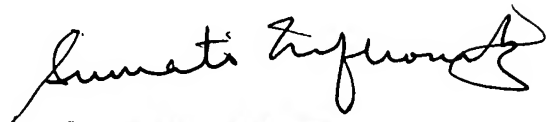
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is 571-272-7771. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

adn/ADN
May 13, 2006



SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER